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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,068	02/18/2005	Yoshiki Hashizume	0033-0983PUS1	5831
2292 7590 11/05/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER ABU ALL SHUANGYI				
ART UNIT 1793		PAPER NUMBER		
NOTIFICATION DATE 11/05/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/525,068

Applicant(s)

HASHIZUME ET AL.

Examiner

SHUANGYI ABU ALI

Art Unit

1793

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6, 12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 08/07/2009

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/17/2009 has been entered.

Response to Amendment

The amendment filed 08/17/2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the referential example is usually the prior art. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over combined teaching of U. S. Patent No. 5,637,143 to Jenkins et al. and U. S. Patent No. 5,364,467 to Schmid et al., further in view of U. S. Patent No. 6,894,089 to Mei et al.

Regarding claim 1, Jenkins et al. disclose an anti-corrosive aluminum pigment of high metallic luster. The aluminum pigment treated with phosphomolybdic acid (col. 5, lines 35 and 36).

But they are silent that the pigment is further coated with silica.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to treat the pigment with silica, motivated by the fact that Schmid et al., also drawn to surface treated aluminum pigment, disclose that the

pigment treated with metal oxide such as silica after coated with molybdenum oxide has distinctly improved resistance to outside influences. (col. 3, lines 26-29).

Combined teaching of Jenkins et al. and Schmid et al. disclose a pigment composition set forth above. But they are silent that the pigment is further coated with a coat prepared from a silane composition as applicants set forth in claim 1.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to coat the pigment of combined teaching of Jenkins et al. and Schmid et al. with a silane layer, motivated by the fact that Mei et al. also drawn to pigment composition, disclose that pigments coated with silane compositions have better processibility and dispersibility in polymeric materials (col. 2, lines 1-3).

Regarding claims 2 and 3, Schmid et al. disclose in one of their pigment examples, that the molybdenum amount is 2.2% and the silicon oxide amount is 18.8 % (col. 9, lines 49-57).

Regarding claim 5, Mei et al. disclose the suitable silane for coating is



wherein R is a nonhydrolyzable functional group directly or indirectly bonded to the silicon atom; R' is a hydrolyzable group such as alkoxy, halogen, acetoxy, hydroxy or mixtures thereof; and x=1 to 3. (col. 3, lines 1-10).

Regarding claim 6, Jenkins et al. disclose that aluminum amount is about 0.4% in the resin coating composition (col. 11, lines 53-60).

Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over combined teaching of U. S. Patent No. 5,637,143 to Jenkins et al. ,U. S. patent No. 5,364,467 to Schmid et al. and U. S. Patent No. 4,842,837 to Shimizu et al., further in view of U. S. Patent No. 6,894,089 to Mei et al.

Regarding claims 12 and 15, combined teaching of Jenkins et al., Schmid et al., and Shimizu et al. disclose a process of making an aluminum pigment coated with molybdenum coat, a silica coat as applicant set forth above.

This is apparent because the combined teachings of Jenkins et al. and Schmid et al. disclose a pigment composition as set forth above. Jenkins et al. disclose a method for the manufacture of an aluminum pigment wherein a molybdenum coating is applied thereto by stirring a dispersed solution of aluminum particles and a molybdenum compound (col. 7, lines 49-57). But they are silent that silica coat is made through the process as applicants set forth in claims 12 and 15.

However, Shimizu et al. disclose a process of making silica by using ammonia as catalyst to hydrolysis of organic silicon compound. Since basic ammonia solution used in reaction, the pH of the reaction mixture will be adjusted upward into the basic range (7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use Shimizu et al. method to making silica coating, motivated by the fact that Schmid et al. disclose that this method is easy and highly productive and the silica made through this method has high purity. (col. 2, lines 1-15).

In view of this, the combined teaching of Jenkins et al., Schmid et al., and Shimizu et al. disclose a process of making an aluminum pigment coated with molybdenum coat and a silica coat as applicant set forth in the claims. But they are silent that the pigment is further coated with a coat prepared from a silane composition as applicant set forth in claims 12 and 15.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to coat the pigment of the combined teachings of Jenkins et al. and Schmid et al. with a silane layer, motivated by the fact that Mei et al. also drawn to pigment composition coated with silane by hydrolysis organosilicon with caustic, disclose that pigment coated with a silane composition has better processibility and dispersibility in polymeric materials (col. 2, lines 1-3).

37 CFR 1.132

The declaration under 37 CFR 1.132 filed 08/17/2009 is insufficient to overcome the rejection of claims based upon the unexpected result as set forth in Office action because: Evidence of unexpected properties may be in the form of a direct or indirect comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims. The claims disclose that molybdenum amount is 0.01-5% and the silicon oxide amount is 1-20 %. Example 10 only discloses that the molybdenum amount is 0.45% and the silicon oxide amount is 4.5 %. Thus while the claims recite a range, the evidence submitted provides for a single point only within that range.

Response to Arguments

Applicant's arguments filed 08/17/2009 have been fully considered but they are not persuasive.

The applicant argues that the instant application has superior unexpected property. The Examiner respectfully submits that Evidence of unexpected properties may be in the form of a direct or indirect comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims. The claims disclose that molybdenum amount is 0.01-5% and the silicon oxide amount is 1-20 %. Example 10 only discloses that the molybdenum amount is 0.45% and the silicon oxide amount is 4.5 %. Thus while the claims recite a range, the evidence submitted provides for a single point only within that range.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHUANGYI ABU ALI whose telephone number is (571)272-6453. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/
Supervisory Patent Examiner, Art Unit 1793

/Shuangyi Abu-Ali/
Examiner, Art Unit 1793